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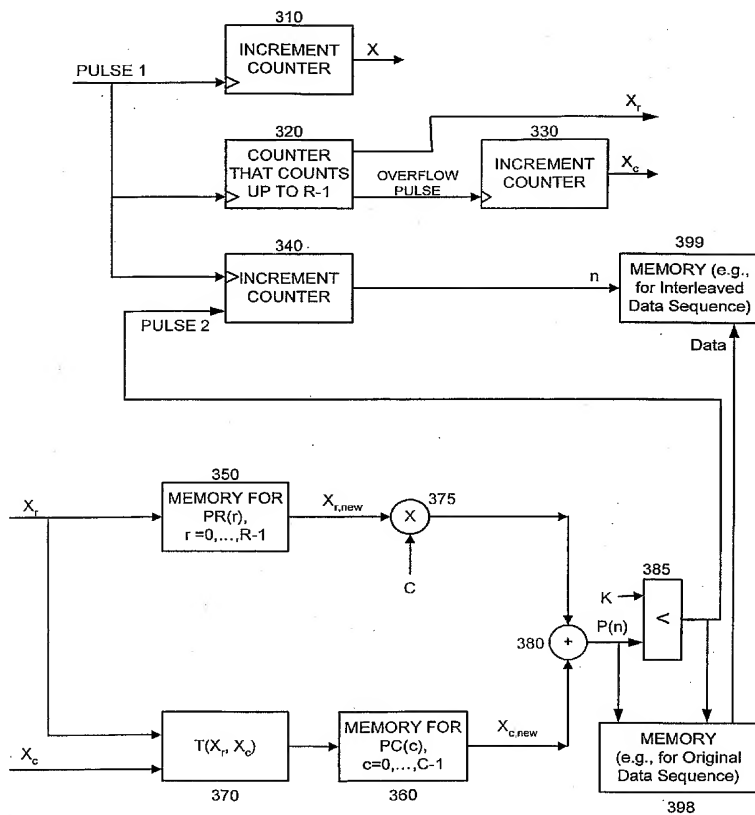
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(54) Title: ADDRESS GENERATION APPARATUS FOR TURBO INTERLEAVER AND DEINTERLEAVER IN W-CDMA SYSTEMS



(57) Abstract: There is provided an address generation apparatus for one of an interleaver and a deinterleaver in a Wideband Code Division Multiple Access (W-CDMA) system. The apparatus includes an address pair generator (300) for generating an address pair $(n, P(n))$ in real-time for one of an interleaver operation and a deinterleaver operation that includes inter-row permutation and intra-row permutation. The address pair $(n, P(n))$ is generated such that, for the interleaving operation, data to be interleaved are read out from the at least one memory device (350, 360) using the $P(n)$ and interleaved data are written into the at least one memory device (398, 399) using the n . Further, the address pair $(n, P(n))$ is generated such that, for the interleaving operation, data to be deinterleaved are read out from the at least one memory device using the n and deinterleaved data are written into the at least one memory device using the $P(n)$.

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